REMARKS

This paper is being provided in response to the Office Action dated November 13, 2006, for the above-referenced application. In this response, Applicant has cancelled claims 64, 68, 73, 77, 82 and 86 (claims 1-32, 36, 40-54, 58 and 62 having been previously cancelled) without prejudice or disclaimer of the subject matter thereof and amended claims 33, 37, 55, 59, 63, 72 and 81 to clarify that which Applicant considers to be the claimed invention. Applicant respectfully submits that the amendments to the claims are fully supported by the originally-filed specification.

The rejection of claims 33, 37, 55, 59, 63, 64, 68, 72, 73, 77, 81, 82, 86, 90 and 91 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,784,373 to Satake, et al. (hereinafter "Satake") in view of U.S. Patent No. 6,721,286 to Williams, et al. (hereinafter "Williams") and further in view of U.S. Patent App. Pub. No. 2003/0149715 to Ruutu, et al. (hereinafter "Ruutu") is hereby traversed and reconsideration thereof is respectfully requested in view of the amendments to the claims contained herein.

Independent claim 33, as amended herein, recites a method of transferring data from a first storage device to a second storage device. The method includes synchronously transferring the data from the first storage device to a first buffer device, asynchronously transferring the data from the first buffer device to a second buffer device, synchronously transferring the data from the second buffer device to the second storage device, wherein the first buffer device acknowledges successful transfer of the data to the first storage device prior to the first buffer device completing transfer of the data to the second buffer device, and providing the data from

the first buffer device to the second buffer device using a network, wherein the data is provided from the first storage device in a first format and is provided to the network in a second format that is different from the first format. The first buffer device converts the data from the first format to the second format and sends the data in the second format to the network. The second buffer device receives the data in the second format from the network and converts the data from the second format into the first format before the data is transferred to the second storage device. Claims 34, 35, 37-39 and 90 depend directly or indirectly from independent claim 33.

Independent claim 55, as amended herein, recites a computer program product, implemented in a computer readable medium, that transfers data from a first storage device to a second storage device. The computer program product is recited as including executable code that synchronously transfers the data from the first storage device to a first buffer device, executable code that asynchronously transfers the data from the first buffer device to a second buffer device, executable code that synchronously transfers the data from the second buffer device to the second storage device, where the first buffer device acknowledges successful transfer of the data to the first storage device prior to the first buffer device completing transfer of the data to the second buffer device, and executable code that provides the data from the first buffer device to the second buffer device using a network, wherein the data is provided from the first storage device in a first format and is provided to the network in a second format that is different from the first format. The first buffer device converts the data from the first format to the second format and sends the data in the second format to the network. The second buffer device receives the data in the second format from the network and converts the data from the second format into the first format before the data is transferred to the second storage device.

Claims 56, 57, 59-61 and 91 depend directly or indirectly from independent claim 55.

Independent claim 63, as amended herein, is directed to a method of transmitting data from a first storage device to a second storage device. The method is recited as including the second storage device receiving the data from the first storage device and the first storage device providing the data to the second storage device using a network, where the data is acknowledged to the first storage device as being successfully received at the second storage device prior to all of the data being provided to the network. The data is provided from the first storage device in a first format and is provided to the network in a second format that is different from the first format. The first storage device converts the data from the first format to the second format and sends the data in the second format to the network. The second storage device receives the data in the second format from the network and converts the data from the second format into the first format. Claims 65-67 and 69-71 depend directly or indirectly from independent claim 63.

Independent claim 72, as amended herein, is directed to a device that transmits data from a first storage device to a second storage device. The device is recited as including means for the second storage device to receive the data from the first storage device and means for the first storage device to provide the data to the second storage device using a network, where the data is acknowledged to the first storage device as being successfully received at the second storage device prior to all of the data being provided to the network. The data is provided from the first storage device in a first format and is provided to the network in a second format that is different from the first format. The second means converts the data from the first format to the second format and sends the data in the second format to the network. The first means receives the data

in the second format from the network and converts the data from the second format into the first format. Claims 74-80 depend directly or indirectly from independent claim 72.

Independent claim 81, as amended herein, is directed to a computer program product, implemented in a computer readable medium, that transmits data from a first storage device to a second storage device. The computer program product is recited as including executable code that causes the second storage device to receive the data from the first storage device and executable code that causes the first storage device to provide the data to the second storage device using a network, wherein the data is acknowledged to the first storage device as being successfully received at the second storage device prior to all of the data being provided to the network. The data is provided from the first storage device in a first format and is provided to the network in a second format that is different from the first format. Executable code causes the first storage device to convert the data from the first format to the second format and send the data in the second format to the network. Executable code causes the second storage device to receive the data in the second format from the network and convert the data from the second format into the first format. Claims 83-85 and 87-89 depend directly or indirectly from independent claim 81.

The Satake reference discloses a switching device for a LAN. The switching device includes an arrangement for storing a packet received at one of a plurality of receiving ports respectively connected to Ethernet segments in a receiving buffer commonly used by the whole of the device, by means of a storage device of the receiving buffer. A transmitting buffer includes a storage device which receives the packet from the receiving buffer. Then, the packet

is transferred from the storage device of the transmitting buffer to one of a plurality of transmitting ports corresponding to an address. (See, for example, FIGS. 1A and 1B and col. 1, lines 53 to col. 2, lines 10 of Satake.) The Office Action states that Satake does not teach providing data from a first buffer device to a second buffer device using a network, wherein the data is provided from the first storage device in a first format and is provided to the network in a second format that is different from the first format.

The Williams reference discloses a method and apparatus for device interaction by format. The Office Action cites to Williams as teaching data being provided from the source in a first format to the network in a second format and teaches data being received by the destination in a third format, wherein the third format is different from at least one of: the first format and the second format.

The Ruutu reference discloses a data communication node capable of operating under TCP protocol in multiple modes, including: a normal mode, an early acknowledgement mode and a fast TCP mode. The Office Action cites to Ruutu as disclosing transmitting an early acknowledgement before completely transmitting the data to the second device. (See page 2, paragraphs 0014-0015, page 4 paragraph 0050 and page 5-6 paragraph 0063).

The Office Action cites to col. 1, lines 45-55, col. 5, lines 26-66 and col. 8, lines 12-42 of Williams as disclosing "data is provided form the source in a first format and is provided to the network in a second format and is received by the destination in a third format, wherein the second format [sic; third format] is different from at least one of the first format and the second

format." (See middle of page 3 of the Office Action). In the cited passages, Williams describes therein a data format hierarchy in which a specific data format path is chosen on the basis of negotiations between the devices. Williams discloses the use of three formats, as noted above, and pre-selection of the data formats based on negotiations between the devices.

Specifically, Williams states that "content data can be provided in all formats by the data format hierarchy embodied in the surface description." (col. 5, lines 50-51 of Williams.) Williams goes on to state: "There does exist the possibility of providing information in more than one format for a single impression: a case where this may prove useful is in retrieval of information from a storage device..." (col. 5, lines 54-57 of Williams). Applicant submits that the cited portions of Williams disclose pre-selection and transmission of data in multiple data formats following predetermined data format paths that are based on negotiations between devices.

In contrast, Applicant's independent claims recite that a first buffer device or first storage device receives data in a first format and converts the data into a second format that is different from the first format. The buffer device or storage device then provides the data in the second format to a network. A second buffer device or storage device receives the data in the first format and converts the data back into the first format. Further, successful transfer of the data to the first storage device is acknowledged prior to completion of the data transfer to the second buffer device or second storage device. (See, for example, page 16, lines 12-15, page 21, lines 10-20 and page 24, line 7 - page 25, line 2 of the originally-filed specification.) Accordingly, Applicant submits that Williams does not disclose at least the features of conversion of data from

a first format to a second format at a first buffer or storage device, transmission of the data in the second format over a network to a second buffer or storage device, and conversion of the data from the second format to the first format at the second buffer or storage device, in the manner as claimed by Applicants.

Applicant submits that Ruutu does not overcome the above-noted deficiencies of the Satake and Williams references with respect to Applicant's presently-claimed invention.

In view of the above, Applicant submits that neither Satake, Williams nor Ruutu, taken alone or in any combination, teach or fairly suggest at least the above-noted features as claimed by Applicant. Accordingly, Applicant respectfully requests that the above-noted rejection be reconsidered and withdrawn

The rejection of claims 34, 35, 38, 39, 56, 57, 60, 61, 65-67, 69-71, 74-76, 78-80, 83-85, and 87-89 under 35 U.S.C. 103(a) as being unpatentable over Satake in view of Williams and Ruutu and further in view of Applicant's admitted prior art (hereinafter "Applicant's APA") is hereby traversed and reconsideration thereof is respectfully requested in view of the amendments to the claims contained herein.

All of the claims set forth in this rejection depend from one of the independent claims discussed above in connection with the rejection based on Satake, Williams and Ruutu. Applicant respectfully submits that the deficiencies of Satake, Williams and Ruutu with respect to the independent claims, discussed above, are not overcome by the addition of Applicant's

APA. Accordingly, Applicant respectfully requests that this rejection be reconsidered and withdrawn.

Based on the above, applicant respectfully requests that the Examiner reconsider and withdraw all outstanding rejections and objections. Favorable consideration and allowance are earnestly solicited. Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at 508-898-8603.

Respectfully submitted,
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